

#### CITY OF KIRKLAND

#### **INVITATION TO BID**

Notice is hereby given that the City of Kirkland will receive sealed bids in the office of the Purchasing Agent, City Hall, 123 Fifth Avenue, Kirkland, Washington, at 3:00 pm local time on May 23, 2012 for the project hereinafter referred to as:

### USED CENTRIFUGAL SCREW PORTABLE PUMPING UNIT JOB NO. 23-12-PW

At said time all bids will be opened and publicly read aloud. Incomplete proposals and proposals received after the time stated above will not be considered. Faxed responses are not acceptable.

The work necessary to furnish one used complete Portable Pumping Unit including screw centrifugal pump, diesel engine, vacuum assisted dry priming system, controls, noise enclosure, and associated accessories and appurtenances to the City of Kirkland at an estimated total cost of \$50,000 to \$55,000. The used Portable Pumping Unit shall have less than 500 working hours and have only pumped water.

<u>The City will not sell bid packages.</u> Bid documents and addenda may be viewed and obtained online at www.kirklandwa.gov. Under "Most Requested", click on: "City Purchasing". This will take you to the "Doing Business with the City" webpage where current City projects are posted.

Questions regarding this project shall be submitted in writing to Noel Hupprich, Senior Project Engineer, at **nhupprich@kirklandwa.gov**. Questions via phone will not be accepted. Bidders shall submit questions no later than May 21, 2012.

The City reserves the right to reject any and all bids, and to waive any informality in the bidding, and to make the award to the lowest, responsive, responsible bidder as best serves the interests of the City.

No bids may be withdrawn within forty-five (45) days after the actual date of the bid opening.

Barry L. Scott, C.P.M. Purchasing Agent

Published: Daily Journal of Commerce – May 16, 2012

**BACKGROUND ON THE CITY OF KIRKLAND:** The City of Kirkland, Washington is located in the Seattle metropolitan area, on the eastern shore of Lake Washington and approximately 10 miles east of downtown Seattle. It has a population of approximately 82,000. The City of Kirkland employs 450 full-time employees and additional seasonal staff. Additional information about the City of Kirkland is available at www.kirklandwa.gov.

**PLANNED PURCHASE:** The City plans on ordering the Centrifugal Screw portable Pumping Unit shortly after the award of contract tentatively scheduled for June 5, 2012. It is also anticipated that other public agencies may wish to utilize this contract as allowed by RCW 39.34.

#### **TENTATIVE SCHEDULE OF EVENTS:**

IFB issued May 16, 2012

Questions due May 21, 2012 at 4:00 pm Pacific Time

Answers Issued May 22, 2012

Bids due May 23, 2012 at 3:00 pm Pacific Time

Anticipated Award June 5, 2012

**QUESTIONS REGARDING THIS IFB:** ALL questions must be submitted in writing (Email is preferred). Questions and answers will be forwarded to all proposing suppliers who provide contact information. In order to make information available to all proposing suppliers, no questions will be entertained after 2:00 pm on May 21, 2012.

Questions regarding the specifications must be addressed to Noel Hupprich, Senior Project Engineer, at <a href="mailto:nhupprich@kirklandwa.gov">nhupprich@kirklandwa.gov</a>

Questions regarding the bidding process must be submitted to Barry Scott, Purchasing Agent at bscott@kirklandwa.gov.

Questions may be mailed to either party at City of Kirkland, 123 5<sup>th</sup> Ave, Kirkland, WA 98033.

**DISTRIBUTION OF BID DOCUMENT AND ADDENDA:** This IFB can be downloaded directly from the City of Kirkland's website at <a href="www.kirklandwa.gov">www.kirklandwa.gov</a> (Click on "City Purchasing" under "Most Requested".) Those who wish to automatically receive any addenda or a notice of cancellation should provide contact information by emailing Barry Scott, Purchasing Agent, at <a href="mailto:bscott@kirklandwa.gov">bscott@kirklandwa.gov</a>. Those who choose not to submit contact information will be solely responsible for monitoring the City's website for any addenda or a notice of cancellation.

**BID PREPARATION:** Firms submitting bids shall be responsible for any and all costs and/or expenses associated with preparing such proposal.

**SUBMISSION OF PROPOSALS:** All bid proposals must be received no later than **3:00 pm Pacific Time on May 23, 2012.** Bids must be signed by an authorized company representative and submitted in a sealed envelope. Bids must be addressed to:

City of Kirkland Attn: Barry Scott, Purchasing Agent IFB No. 23-12-PW 123 5th Ave Kirkland, WA 98033

It is the responsibility of the supplier to be sure the proposals are sent sufficiently ahead of time to be received **no later than 3:00 pm** on the due date. Proposals received after the deadline will not be considered for award of contract.

**EVALUATION PROCESS:** This is an Invitation for Bids for a specific item and our intent is to award the contract to the responsible supplier that submits the lowest responsive bid.

**CONTRACT:** The contract shall consist of the following documents: The Invitation for Bids (IFB), the accepted bid, any purchase orders issued by the City and any agreed upon written changes to any of the foregoing documents. The contract documents are complimentary and what is called for in any one document shall be binding as if called for by all.

**COOPERATIVE PURCHASING:** RCW 39.34 allows cooperative purchasing between public agencies in the State of Washington. Public agencies which have filed an Intergovernmental Cooperative Purchasing Agreement with the City of Kirkland may purchase from City of Kirkland contracts. The City of Kirkland does not accept any responsibility for purchase orders issued by other public agencies.

**COMPLIANCE WITH LAWS:** The supplier shall comply with all applicable federal, state and local laws, rules, and regulations, affecting its performance and hold the Purchaser harmless against any claims arising from the violation thereof.

**NONCOLLUSION:** The supplier must certify that their firm has not entered into any agreement of any nature whatsoever to fix, maintain, increase or reduce the prices or competition regarding the items covered in this Invitation for Bids. Supplier is to complete the attached Noncollusion affidavit and submit it with the proposal.

**PAYMENT TERMS:** Net 30 days after delivery, acceptance and receipt of invoice. Acceptance includes inspection and approval by City of Kirkland's Police Department and Fleet staff.

**FREIGHT TERMS:** Quoted price is to include delivery to designated locations. Shipping will be FOB destination and include delivery.

#### CENTRIFUGAL SCREW PORTABLE PUMPING UNIT

#### **EQUIPMENT AND COMPONENT NAME (S) AND NUMBER (S)**

Refer to Supplements

#### PART 1 GENERAL

#### 1.1 WORK OF THIS SECTION

- A. Work: The work necessary to furnish one used complete Portable Pumping Unit including screw centrifugal pump, diesel engine, vacuum assisted dry priming system, controls, noise enclosure, and associated accessories and appurtenances.
- B. Unit Responsibility: The Work requires that the Centrifugal Screw Portable Pumping complete with all accessories and appurtenances (including, but not necessarily limited to, diesel engine, starter, control panel, hoses, priming system, and noise enclosure be the end product of the supplier. The supplier shall furnish all components and accessories of the system to enhance compatibility, ease of operation and maintenance and, as necessary, to place the equipment in operation conforming to the specified performance, features, and functions. The foregoing shall in no way alter or modify CONTRACTOR'S responsibilities under the Contract Documents. CONTRACTOR is responsible to OWNER for providing the equipment systems as specified herein.
- C. Like items of equipment provided hereunder shall be the end products of one manufacturer in order to achieve standardization for appearance, operation, maintenance, spare parts and manufacturer's service.

#### 1.2 REFERENCES

- A. The following is a list of standards which may be referenced in this section:
  - 1. American Bearing Manufacturers' Association (ABMA)
  - 2. American National Standards Institute (ANSI): B16.1, Cast Iron Pipe and Flanges and Flanged Fittings
  - 3. ASTM International (ASTM): A48, Standard Specification for Gray Iron Castings
  - 4. Hydraulic Institute Standards (HIS)
  - 5. Occupational Safety and Health Administration (OSHA).

#### 1.3 DEFINITIONS

A. Terminology pertaining to the pumping unit performance and construction shall conform to the ratings and nomenclature of the Hydraulic Institute Standards.

#### 1.4 SUBMITTALS

#### A. Action Submittals:

#### 1. Shop Drawings:

- a. Make, model, weight, and horsepower of pump assembly.
- b. Complete pump, diesel engine, and vacuum pump catalog information, descriptive literature, specifications, and identification of pump materials of construction.
- c. Performance data curves at nominal pump speed showing head, capacity, horsepower demand, NPSH required, and pump efficiency over entire operation range of pump, from shutoff to maximum capacity. Indicate separately head, capacity, and horsepower demand, NPSHR and overall efficiency require at Rated Conditions and at Secondary Conditions.
- d. Performance data curves for rated pump RPM.
- e. Certified detailed mechanical and electrical drawings showing equipment dimensions, arrangement, assembly, including locations and type of connections and weights of major equipment and components.
- f. Complete diesel engine nameplate data, engine manufacturer, including any motor modifications.
- g. Factory Finish System

#### B. Information Submittals:

- 1. Special shipping, storage and protections, and handling instructions.
- 2. Manufacturer's printed installation instructions.
- 3. Suggested spare parts list to maintain equipment in service for period of 1 year and 5 years. Include a list of special tools required for checking, testing, parts replacement, and maintenance with current price information.
- 4. List special tools, materials, and supplies furnished with equipment for use prior to and during startup and for future maintenance.
- 5. Operation and Maintenance Data:

#### 1.5 OPERATIONS AND MAINTENANCE DATA

- A. O&M Manuals: 1 Complete set Electronic and 1 hard copy.
- B. Maintenance Summary Forms

#### 1.6 EXTRA MATERIALS

A. Furnish for each set of pumps: One complete set of any special tools required to dismantle pump.

#### PART 2 PRODUCTS

#### 2.1 GENERAL

- A. Provide a complete, coordinated, and fully functional operating system.
- B. Coordinate pump, diesel engine, and priming system as a system.
- C. Pumps supplied under this Section to be a standard product of manufacture and to have proven reliability.
- D. Portable pump system to be capable of running dry or in snoring conditions.

#### 2.2 MANUFACTURERS

- A. "Screwsucker<sup>TM</sup>" 6 inch Portable Pumping System, Model 125H by APSCO, Inc. of Kirkland, WA. (ph. 425-822-3335).
- B. Or approved equal

#### 2.3 EQUIPMENT DESCRIPTION AND CONSTRUCTION DETAILS

#### A. Pump

- 1. Pump shall be a Hidrostal E125-HO3R Pump. The basic design shall be a single passage, clog free pump utilizing a screw centrifugal impeller. At 1800 RPM Pump shall be capable of:
  - a) 800 GPM @ 82 feet TDH @ 75 % efficiency
  - b) 1200 GPM @ 56 feet TDH
  - c) BEP 78 % 1030 gpm @ 74 ft TDH
- 2. Continuously rising head-capacity curve from runout to shutoff.
- 3. Designed to operate continuously at any point in specified operating range of performance curve without cavitation, overheating, or excessive vibration.
- 4. Engine nameplate horsepower rating not to be exceeded by pump brake horsepower required at any point on nominal pump performance curve.
- 5. Pump shall be capable of continuous operation in dry condition.
- 6. Pump shall be capable of passing 4 inch spherical solids

#### B. Casing:

1. Back pullout design allowing for removal of rotating element without disturbing piping connections.

- 2. Heavy wall, one-piece volute construction with integral flanged discharge flange and smooth fluid passages. Provide drilled and tapped volute vent and drain connections.
- 3. The pump volute, back plate and suction piece housing shall be of close-grained cast iron, ASTM A48-CL30.
- 4. The impeller shall be ASTM A-743 high Chrome Screw Centrifugal type.
- 5. The suction shall have an independently replaceable suction liner minimum 60HRC ASTM A532, -IIIA and shall be externally adjustable by means of three stainless steel regulating screws. Each adjusting screw shall incorporate a mechanism for positively advancing, positively retracting, and positively locking the position of the suction liner in so that the necessary running clearances between the liner and impeller can be maintained.

#### C. Bearing Housing

- 1. The bearing housing shall be of cast iron, ASTM A48C1-30 and shall be of the back pull out design.
- 2. The shaft shall be steel and provided with suitable bearings capable of taking all mechanical and hydraulic loads. Unless otherwise specified, bearings shall provide a minimum B10 bearing life of 50,000 hours without credit for hydraulic balancing by pump out vanes, grooves, or wear rings.
- 3. The shaft seals shall be isolated from contaminants in the pumped media by a labyrinth fit between the impeller backside and the volute back plate, as well as by pump-out grooves machined into the impeller back shroud and into the volute back plate, to prevent debris reach the shaft seal.

#### D. Mechanical Seal

- 1. Tandem Mechanical Seal Arrangement requiring no external flush. shaft sealing shall be by independently-mounted, tandem mechanical seals contained in an oil chamber that is formed as an intrinsic part of the bearing frame and allows the seals to be completely submerged in and lubricated by the oil bath. Externally mounted oil reservoirs are not acceptable.
- 2. The mechanical seal nearest the bearing shall utilize silicon Carbide/Silicon Carbide faces and shall isolate the seal cooling oil from the bearing frame.
- 3. The mechanical seal nearest the impeller shall be a stainless steel or rubber bellows type construction firmly attached to the rotating face and clamped to the shaft, to prevent contaminants from contacting the stainless-steel spring which loads the seal face. The seal faces shall be a solid tungstencarbide rotating face running against a solid silicon-carbide stationary face. Seals with both faces of similar materials, or seals, with bonded, soldered, or converted face surfaces are not equal or acceptable.

#### E. Diesel Engine

- 1. The Diesel Engine shall be a Perkins 404D-22
- 2. The Engine starting system shall be 12 volt. Operation may be manual or with automatic level switching.
- 3. A 12 volt electric starter shall be an integral part of the engine.

#### F. Priming System and Control Panel

- 1. The priming system shall be a "dry prime" vacuum system which shall incorporate a priming chamber, priming probes, and controlled via an electronic control module.
- 2. A Busch Vacuum pump shall be supplied. The vacuum pump shall be oil lubricated and driven by a magnetic clutch from the diesel engine via a V-belt from the pump shaft. A solenoid valve will operate simultaneously with the vacuum pump clutch. The normally closed solenoid valve will only open when the magnetic clutch on the vacuum pump is engaged.
- 3. The priming chamber shall have a clear Plexiglas viewing window with electronic level probes mounted in the priming chamber.
- 4. An electronic control panel shall be furnished to control the dry prime vacuum system.
- 5. Venturi priming system and diaphragm pumps are unacceptable.

#### C. Control Panel

- 1. A control panel will be furnished in a NEMA 4X enclosure. The outside of the panel shall be furnished with an hour meter, run light, automatic start /stop and level control switch.
- 2. The control panel will be furnished with a connection for automatic startstop of the unit with 200 ft long level control probes.
- 3. A cell phone connection will be supplied in the controller so that the unit can be monitored from a remote location.
- 4. The control panel shall operate and incorporate all the electrical features for the engine, pump, priming system, and automatic level control.
- 5. A magnetic clutch is to be provided that couples the primary pump, vacuum pump and diesel engine together. The magnetic clutch control is to be incorporated into the control module.
- 6. Engine temperature and oil pressure shutdown protection shall be included.

#### D. Sound Attenuated Enclosure

- 1. The pump, diesel engine, control panel, and priming system shall be mounted in a sound enclosure. With the unit operating at full speed, Contractor must guarantee a noise level not to exceed 72 dBA @ 3ft.
- 2. A minimum 50 gallon integrated fuel tank shall be part of the enclosure. Under the fuel tank shall be a containment vessel to prevent fuel, water or oil from spilling on the ground around the unit. A fuel gauge is to be supplied that will have a connection to the integrated cell phone in the control module.
- 3. A lifting eye is to be integrated into the sound enclosure for lifting of unit.
- 4. The pumping unit is to be supplied with four sound proof doors that are all lockable.
- 5. A heavy duty 12volt Marine Battery is to be furnished.
- 6. 6" Camlock Suction and Discharge Connections to be furnished respectively

#### E. Hoses

- 1. 2-8" female PT camlock x 6" female PT camlock adapter
- 2. 1-8" PT female camlock x 6" PT female camlock adapter
- 3. 1-8" PT Female camlock x 8" flange 150lb ANSI adapter
- 4. 1-8 flange 150 lb ANSI x 8" PT male camlock adapter

#### F. Fuel Consumption

1. The 6" pump system shall be capable of running continuously without refueling for 66 hours at 1800 rpm on 66 gallons of diesel fuel.

#### 3.5 MANUFACTURER'S SERVICES

- A. Installation, Startup, and Testing Services:
  - 1. NOT USED
- B. Training Services
  - 1. NOT USED
- C. Pump Supplier must be able to provide emergency maintenance and pump rental with-in one hour of notification.

## BID PROPOSAL CENTRIFUGAL SCREW PORTABLE PUMPING UNIT JOB NO. 23-12-PW

Bid proposal must be signed and submitted with other proposal items. Bid must be marked for Job No. 23-12-PW and delivered to: City of Kirkland, Attn: Purchasing Agent, City Hall, 123 Fifth Avenue, Kirkland, Washington 98033.

Bid proposal must be delivered to the Purchasing Agent no later than 3:00 pm, May 23, 2012.

Having carefully examined the Invitation for Bids and Specifications, the undersigned proposes to furnish one used complete Portable Pumping Unit including screw centrifugal pump, diesel engine, vacuum assisted dry priming system, controls, noise enclosure, and associated accessories and appurtenances in compliance with the above specifications for the amount set forth below. The used Portable Pumping Unit shall have less than 500 working hours and have only pumped water.

Item Description	Qty	Unit Price	<b>Extended Price</b>
Used complete Portable Pumping Unit including screw centrifugal pump, diesel engine, vacuum assisted dry priming system, controls, noise enclosure, and associated accessories and appurtenances (IN ACCORDANCE WITH TERMS, CONDITIONS AND SPECIFICATIONS)	1 EA		

Delivery:	days after receipt of purchase order.
	is hereby acknowledged.
Street Address:	
City, State, Zip:	
Printed Name & Title:	
Signature:	Date:

# CITY OF KIRKLAND INVITATION FOR BIDS CENTRIFUGAL SCREW PORTABLE PUMPING UNIT JOB NO. 23-12-PW STATEMENT OF SUPPLIER'S QUALIFICATIONS

Each supplier shall provide the following information along with their proposal.

1.	Company:					
2.	Business Address:					
3.	Business Phone:		Fax:			
4.	How many years have yo	ou been engaged ir	n business under the p	oresent firm name?		
of	List recent projects comp work and approximate co imbers.)	ist recent projects completed by your company, including contracting agency type ork and approximate cost: (Provide at least three contract references with phone bers.)				
	(1)					
	(2)					
	(3)					
	(4)					
	(5)					
6.						
7.	State of Washington Registration No.:					
	Federal Tax Identification No.:					
wit	I certify that other contrict the timely performance of successful bidder.	acts now in progre services to the City	ess or hereafter obtair of Kirkland should I b	ed will not interfere become the		
	Į.	Authorized Signatur	e:			
	F	Print Name:				
	7	- itle:		Date:		

Return this form with your bid proposal by 3:00 pm on May 23, 2012

#### NONCOLLUSION AFFIDAVIT CENTRIFUGAL SCREW PORTABLE PUMPING UNIT JOB NO. 23-12-PW

STATE OF WASHINGTON ) SS	
COUNTY OF KING )	
The undersigned, being duly sworn, de association, co-partnership or corporation indirectly entered into any agreement, partiany action in restraint of free competitive be a proposal to the Owner for considerat improvements described as follows for the Owner for the O	cipated in any collusion, or otherwise taken idding in the preparation and submission of ion in the award of a contract on the
Primary supplier CENTRIFUGAL So	CREW PORTABLE PUMPING UNIT.
FIRM NAME	AUTHORIZED SIGNATURE
Sworn to before me, this day	/ of, 2012.
	Notary Public in and for the State of Washington Residing at
	My Commission Expires: